



Steven M. Ruben  
Appl. No. 10/662,429

BEST AVAILABLE COPY

Department PROTEIN EXPRESSION  
Subject 1.1.1.1  
Name SOLANGE HENSCHKE LINN  
Address \_\_\_\_\_

 43-648

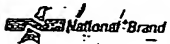

**Computation Notebook**  
Dennison Stationery Products Co., Framingham, MA 01701

  
0 75333 45648 8

75 Sheets  
11 1/2" x 9 1/2"  
4x4 Quad.

Ruben EXHIBIT #69

Human Cell Sciences, Inc.  
Laboratory

Department	PROTEIN EXPRESSION
Subject	1. <del>Protein</del> A
Name	SOLANGE HENSCHKE LYNN
Address	
 43-648	
<b>Computation Notebook</b>	
Dennison Stationery Products Co., Framingham, MA 01701	
	75 Sheets 11 1/2" x 9 1/2" 4x4 Quad.
73333-43648	

Ruben EXHIBIT 2069  
Ruben v. Wiley et al.  
Interference No. 105,077  
RX 2069

2

# 1 A.2 30  $\mu$ m  $\rightarrow$  split to 60  $\mu$ m M+x  
 1 A.2 60  $\mu$ m  $\rightarrow$  1 to 30  $\mu$ m and MEM +

# 1 A.5 50  $\mu$ m  $\rightarrow$  split to 60  $\mu$ m  
 1 A.5 60  $\mu$ m  $\rightarrow$  split to 30  $\mu$ m M+x and in MEM +

# 1 A.d 50  $\mu$ m  $\rightarrow$  split to 60  $\mu$ m  
 1 A.d 60  $\mu$ m  $\rightarrow$  split to 30  $\mu$ m M+x and in MEM +

2/17/95 Injections Spinous Flasks in Ex-401 of PRB

REDACTED

2/17/95 Transfections in S/9 cells

REDACTED

3) HTPAN08.S04-515P

4) HTPAN08.S04-1855P

The DNA concentration  
 of all was  $\approx 1 \mu$ g/ $\mu$ l

Is 3, 2, 3, 4 I have  
 the sequence report  
 sheet

REDACTED

procedure like page 1

4

2/21/95

I gave ~ 500 ml of supernatant to Mark

REDACTED

2/22/95

PLAQUE Purification:

REDACTED

HTPA N08504 - 516p

HTPA N08504 - 185 bp

REDACTED



2.22.95

**REDACTED**

2.22.95

2.22.95 2) harvested the transfections in 519 cells  
from 12.17.95

**REDACTED**

3) HTPAN08504-515p

4) HTPAN08504-1856p

**REDACTED**

**REDACTED**

3.1.95 Injection S49 cells with plaque purified  
virus of

**REDACTED**

HTPA N08504 - 51bp

\* HTPA N09504 - 125bp

from 2.22.95

2 plaques of each

\* I had plaques only in the first dilution

**REDACTED**

3.6.95

Harvested S19 cells infected on 3.1.95  
with plaque prep'd virus

blue assay

**REDACTED**

H1PANO8504 (-185bp) ① + + +  
H1PANO8504 (-185bp) ② + +

H1PANO8504 (-515p) ① - (negative) ⇒ to be  
H1PANO8504 (-515p) ② extremely weak ⇒ redone  
↓  
kept 10.05. redone on 3.8.95

**REDACTED**

3/8/95 Injection S19 cells with plaque purified  
virus of

**REDACTED**

3) HTPAN08504 - s16D from 2.2.2.95

**REDACTED**



3.12.95 Split CHO Stammocalcin clones from 3.1.95

all 4 clones are finished and amplified up to 100  $\mu$ M M+X and the cells were used today in MEM+

StC = 1A.d

StC = 1A.e

StC = 1B.C

StC = 1A.b

3.13.95 Harvested transfections from 3.8.95

Drase 04-101  $\rightarrow$  did not work for the 2nd time!!

HPFCT89X (PS6-3)  $\rightarrow$  blue arrows positive!

3.13.95 Harvested 293 cells infected with plaque purified virus from 3.8.95

HIBCL22 (3) good  
(4) weaker

HUVCT01532 (V16F) (1) both good  
(2)

HTPAN08 - 51bp (5) did not work for the  
(6) 2nd time  $\rightarrow$  has to be plaque purified again

3.15.95 NOTE: today Reimer send to Frank Aeschken 3 vials of FLAP, labelled as: V-HAPAK-1 = Flap 1 + 16  
V-HAPAK-2 = Flap 1 + 14

18

3/14/95

Harvested the virus stock HTPAN08504

= 185.612

from 3.9.95 (not in the lab book)

The blue array was positive

**REDACTED**

22

REDACTED

32375

*Injections Spinnies flasks in ex-61-PBS*

REDACTED

1. 4

*HTPAN08504-185 b P (Ca. ligand)*

REDACTED

24

3	28	75
---	----	----

Harvested spinners flasks injected  
on 3.23.95

**REDACTED**

1.11 HTPAN08504 -185bp → jupe and cells  
to Hayerse

**REDACTED**



**REDACTED**

**REDACTED**

3.30.95

*Injection Spinner flask in CX-401 GPCR*

**REDACTED**

26

2 samples

HTPAND8504 - 1855p

REDACTED

28 |

REDACTED

4 5 95 Harvested the spinners flasks injected  
on 3,30-95

REDACTED

44P77ND8504-1856.P to Rajeev

REDACTED

**REDACTED**

9.11.95 PLATONE Purification  
HTPAN08504 - Sib. Adulone

**REDACTED**

**REDACTED**



**REDACTED**

4.18.95

Injection Sfg. cells with plaque purified  
virus from 4.11.95

H+PAN09504 - S15P - was contaminated!

**REDACTED**

see 4.21.95

I pick three plaques by aaph  
b/c the plaques were too small!!SUPERVISOR- Robert JenkinsDATE- 4/19/95P. N. 12.

REDACTED

4.21.95

NOTE: the S19 cells infected on 4.18.95 with plaque purified virus were not positive in the blue assay so I decided to re-infect them again

↓

4.21.95

PLAQUE PURIFICATION

HTRAND804 - 11bp

HFKEB40 6-9

ND6NCID

1.96 to

**REDACTED**

4.21.95	<p>infection Lys cells with plaque purified plaques from 4.21.95</p> <p>HTPAN08504 - 51 b.p. a small plaque</p>
---------	---

REDACTED

38	
5395	Gharvested S <sub>9</sub> cells injected with plaque purified virus from 4.27.95 blue assay according to Lam
HTRAV08504 -51 bP	① + ② +

REDACTED



5575 Injection 2/9 cells for virus stock

HTPA NO8504 -slbp (2)

**REDACTED**

Amount of virus: 50 ul / flask

**REDACTED**

Ht PA NO8504 -slbp (2)

**REDACTED**

blue assay  
positive for all

REDACTED

5/19/95

thawed new Sf9 cells

1 vial of Sf9<sup>+</sup> Grace 101 FBS - D.S.  $\times 10^6$ /ml P: 31-321 vial of Sf9 in ex-600 21 FBS - D.S.  $\times 10^6$ /ml P: 31-32

## Procedure:

- thaw the vials quickly in 37°C bath
- resuspend the cells and transfer them to a tube with 10 ml of media
- spin for 5' at 0.1 rpm
- discard the supernatant
- resuspend the pellet in 1 ml of media
- inoculate in 25 cm<sup>2</sup> flask
- incubate at 27°C for 2 to 3 days

SUPERVISOR- Walter J. J.DATE- 5-19-95

72

6395 Harvested spinners flasks infected  
9.29.93

2 spinners	H+PBS 22	secreted protein	→ David
2 " "	HMSAF 22	unknown	→ Roger
2 " "	Rat Stem Cell		→ Peter
2 " "	PGF-15	HATCK89	→ Rao
1 " "	HEI BE01-03		→ splitting
	" "	Ed	

10395 Transfections in CHO cells dhfr-

HUVE091 → TNF &amp; pN346

HUVE091 → TNF &amp; pCHO-1

see the Sequence Verification Report sheet

TRANSFECTION, SELECTION, CLONING, AMPLIFICATION  
SCALE UP of Recombinant CHO dhfr- Cellsfor more  
information

## PHASE 1

## PROCEDURE:

TRANSFECTION: Co-transfect CHO dhfr- cells in 35mm culture dish using LIPOFECTIN.

PROCEDURE: (T1) Prepare the 35mm culture dish of cells the day before doing the transfection so that it is about 80% to 90% confluent.

(T2) Remove the culture medium and wash the plate once with PBS. Add 1ml of OPTIMEM, GIBCO Cat. No. 61-01983M without FCS (or 1ml of culture medium without FCS). Return plate to 37°C until required.

(T3) Prepare the following transfection mix in two separate POLYSTYRENE test tubes, NUNC Cat. No. 3-41343A:

A: 90µl OPTIMEM or Culture medium without FBS.  
10µl LIPOFECTIN, BRL Cat. No. 82975A.B: 50µl OPTIMEM or Culture medium without FBS.  
5µl Plasmid DNA at 1µg per µl.  
0.5 µl Co-transfection DNA at 1 µg per µl (G418 Resistance Plasmid pSV1 Neo).

Mix the contents of tube A with that of tube B and allow to stand for 10 to 15 minutes before addition to cells.

(T4) Remove culture plate from incubator and add the transfection mixture to it dropwise around the plate.

(T5) Return the plate to incubate at 37°C. Shake the plate forward and sideways in order to allow the DNA mixture to be evenly distributed over the cell surface. Incubate the plate for a further 4 to 6 hours. After this, add 1ml of medium containing 10% FBS and 200µg per ml of Gentamycin. Return the plate to incubate for 24 to 48 hours before harvesting the cells for selection.

10.9.95 Harvested CHO cells transfected on  
10.5.95 and seeded them in selective medium.

## PHASE 2

### SELECTION OF RECOMBINANT CLONES

PROCEDURE : (S1) Examine the transfected plate to make sure there is no microbial contamination. The cells should be confluent and in good condition.

(S2) Remove the culture medium from the transfected plate and wash the monolayer with 2ml of PBS. Remove the PBS and add 0.5ml of Trypsin / EDTA GIBCO Cat.No.043-05300, and return to 37°C for 5 minutes.

(S3) Resuspend the detached cells in 5ml of selection medium :

Alpha(-)MEM (without Ribonucleosides & Deoxy ribonucleosides), GIBCO Cat.No.041-02561.  
5% Dialyzed FBS, GIBCO Cat.No.220-6300A1.  
800 to 1000µg per ml of G418 Sulphate

(Geneticin), GIBCO Cat.No.066-1811.

0.01µM Methotrexate (MTX)

(+ Amethopterin) SIGMA Cat.No.A-6770.

(Prepare a 5 mM stock solution of MTX in

Alpha(-)MEM. Sterilize through a 0.2µm filter.

Dispense in 5 ml. aliquots and store in the dark

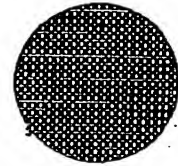
at -20°C).

100 to 200µg per ml of Gentamycin.

Amined Cat.No.4-07F00-H

Resuspend the cells well by gently sucking up and dispensing in order to have a homogeneous cell suspension.

(S4) Dilute this suspension to approximately 45 ml. Dispense 15 ml. of this suspension into each of three 'Hybridoma' cloning plates from GREINER Cat.No.633-160. Take care to fill all the micro-wells and to avoid air bubbles being trapped in them.



'Hybridoma' cloning plate.

(S5) Return the plates to incubate at 37°C for 10 to 14 days. The plates can be examined after a week but colonies are generally too small to be picked at this stage. There should be no need to change the medium over this period unless there are an unusually large number of colonies. If the medium needs to be replaced then use the same medium as above.

Go to the following  
procedure book  
page 77

10.5.95 Injections 5/9 cells for virus stock.

HERBEO1-E2 (endometrial tumor specific gene)

HERBEO1-91

10.5.95. I seeded today CHO transfection clones  
from T.21.95 in roller bottles in  
MEM + 50µM MTX + 5% dFBS  
cho. after passaging the cells two times in +FBS  
and did work well after 8 days.

74

10.6.95 Injections Spinner flasks in CX-40 C/PBS

Dexamethasone Stc-1-C5 2 spinner

HMSAF22 unknown 2 1.

HTPB.S22 reconstituted molin 5 "

EGF-14 2 "

EGF-15 2 "

250 ul of radioactive spinner

10.9.95 Harvested the 519 cells injected on 10.5.95 for virus stock

HETERO1-D1

blue assay  
no infection both

HETERO1-E2

10.10.95 Harvested Spinner flasks injected on 10.6.95

Dexamethasone Stc-1-C5 1 spinner to Rogers

HMSAF22 unknown 2 " to Rogers

HTPB.S22 reconstituted molin 5 " to David

EGF-14 2 " to Peter

EGF-15 2 " to Rose

p. 96.6

## 10 095: PLAQUE PURIFICATION

OIF Homology PA2 HARA044  
 PA2GP HARA044

from 9.28.95

Memphain homology PA2 HMBE22  
 PA2GP HMBE22

H+35B90 A2 unknown from 7.25.95  
 to obs. this virus had to be plaque  
 purified again because we finished  
 by mistake with the 2ml stock plaques  
 that was good in 535 labelling

obs: no good plaques after 6 days  
 redone on 10.11.95

10 12 95 Split two spinovirus clones in 200 cells  
 (roller bottles) from 10.5.95

I split the cells in MEM 2 - +St-diFBS  
 + 25.4m M+X

31.2 → 9 roller bottles after  
 150 ml of media/roller bottle splitting

10 13 95 Injections Spinner Flasks in TX-401 w/o FBS

12 spinners HTPB622 recited protein

250 ul of virus/spinner

J. 96.60

SUPERVISOR- *Plim*

DATE- 10/13/95

76

10.12.95 PLAQUE PURIFICATION

Re-purification of viruses from 10.10.95  
because I had no good plaques this  
time I infected the Sf9 cells with  
dilutions from  $10^{-4}$  to  $10^{-8}$

Unfortunately again I had no good results  
after 6 days of the purification and  
I will try to make more and dilute the  
virus up to  $10^{-12}$  or  $10^{-13}$

10.17.95 Harvested Spinnous flasks infected  
on 10.13.95

Hi PBS22 12 spinous  
(OD66)

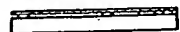
I gave the supernatant to  
David

10.10

10/18/95 Picking clones of tNF  $\gamma$  HIV-1  
cno cells from 10/4/95

**PHASE 1  
CLONING  
PROCEDURE**

(C1) Remove the 'Hybridoma' cloning plates after 10 to 14 days of incubation at 37°C. Suck off the surplus medium with a pasture pipet. Then add 15 ml. of PBS to the dish and swirl round to wash the plate. Remove the excess wash WITHOUT removing any of the liquid from the micro wells.



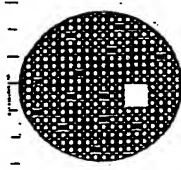
Inverted cloning plate. The surface tension prevents the liquid in the micro-wells from flowing out and prevents the plate from drying out.

(C2) Invert the plate (None of the liquid in the micro wells comes out). Observe the inverted cloning plate under a low power Binocular microscope (NIKON x10 to x30 magnification). This allows you to view a

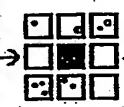
*we do not invert because we don't have this specific Nikon microscope. Instead, we look the clones in the normal position and we keep 5ml of PBS while looking and labeling the clones with a pen.*

→ greater area of the plate and to choose colonies much faster.

(C3) With a bit of practice you should be able to pick out wells containing only one clone. Circle or color the well with a MUNC Cryo Pen Cat.No.319993. Choose 24 clones from different parts of the plate.



Next well containing single clone



Well with a single clone

(C4) Add 15 ml. of PBS to the plate for a final wash.

(C5) Method 1: Suck off all the liquid (PBS) from the plate including the liquid in the micro wells.

Add 5 ml. of Trypsin/EDTA to the plate and swirl it around in order to fill all the micro-wells. Tilt the plate and suck off all the excess trypsin. (There is still enough trypsin held in each well to detach the cells. Incubate the plate at 37°C for 5 minutes.

Method 2: Only suck off the PBS from the micro wells which have been marked. Add 5  $\mu$ l. of Trypsin/EDTA to the well and incubate at 37°C for 5 minutes. Remove the contents of the well and proceed as directed below in (C6).

After removing the clones, add 15 ml. of PBS to the plate, swirl around and suck off all the liquid including that from the micro-wells.

Add 15 ml. of selection medium to the plate and return to incubator. This allows the plate to be used again to pick more clones if necessary.

(C6) Prepare three 24 multi-well plates with 1 ml. of selection medium (as described above but WITHOUT any G418) per well.

1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24

Number each well in the three 24 multi-well plates from 1 to 72.

TAKE CARE TO TREAT EACH CLONE SEPARATELY IN ORDER TO AVOID CROSS CONTAMINATION BETWEEN CLONES.

*obs: I pick 10 clones of the construct with pCHO-1 vector and 9 clones with the p346 vector. I had much more clones with pCHO-1 vector.*

*we do method 2*



10/19/95 Split Roller bottles from 10.12.95

CHO Stanniocalcin 2 clones in

MEM 2+ 51-FBS

total:

2 split 1 to 4  $\Rightarrow$  16 roller bottles

10.20.95 Injections Spinner flasks

4 spinners HCFB49 GP C1GF-3 14 C140 W10FBS

3 " F6F-15 H11C189 "

1 spinner RA+ Stanniocalcin (1) + 31 H.1.FBS

1 " " (2) + 31 H.1.FBS

10.21.95 Harvested Spinner flasks injected above

7 sp. C1GF-3  $\rightarrow$  sup to Scott

3 " F6F-15  $\rightarrow$  " to Rao

The spinners of Stanniocalcin media harvested on 10.25.95

10.25.95 Split Roller bottles from 10.19.95

CHO Stanniocalcin 2 clones in

MEM 2+ 51-FBS

total:

2 split 1 to 4  $\Rightarrow$  64 roller bottles

obs: 2 gave 4 l supernatant today  
to Alex for purification.

b2695 Amplification (Phase 4) of the CHO clones  
from 10.18.95 TME HUVE011

Procedure:

Look the cells and check if the clones are at least 60% confluent

Remove the media and make aliquots to check for the best expression

OFBS I gave to Jan Brdusik the picked ones

100 ul of clone #s

pCHc-1

- ①
- ②
- ③
- ④
- ⑤
- ⑥

③

3. → I changed the media with the same MFX concentration as before = 10mM

④

10 → changed media

pN346

- ①
- ②
- ③
- ④
- ⑤
- ⑥

2 → changed media

9 → " "

h → died

wash the monolayers with 1 ml of PBS  
Remove the PBS

Add 250 ul of lysis buffer and incubate for 5 minutes at 0-37°C

Resuspend the cells adding to them 250 ul of nuclear lysis buffer + 5 ul of diluted PBS

Prepare the media with the different concentrations of MTX that you decided to use.

a. Dilute 10  $\mu$ l of MTX (from 5 mM stock solution) in 1 ml of media + 5% FBS.

b. Take this dilution (1 ml) and add it to 99 ml of media and you will have the final concentration of 500 nM.

Prepare the 6 well dish and add the amount of media with MTX and w/o MTX as below:

MTX concentration	500 nM	normal media
10 mM	40 $\mu$ l	1.96 ml
30 mM	120 $\mu$ l	1.68 ml
90 mM	360 $\mu$ l	1.64 ml

For each clone you will have now 3 wells with 3 different concentrations (10, 30 and 90 nM). Add the approximately the same amount of cells in each of the 3 wells (taking care not to mix the different clones).

Incubate at 37°C and look how the cells are growing in the next days.

~~1.96 ml~~

10/27/95 Injections Lymphatic flasks 12-17-95 WOFAT

8 specimens HMSAF22

9 " HTPBS22 (ODGF)

10/31/95 Harvested specimens flasks infected culture

8 ap HMSAF22 to Royce

9 " HTPBS22 (ODGF) to David

10/31/95 Harvested roller bottles (2/11) from 10/25/95

I gave the supernatant to Alex ~ 13L

and the media was replaced the same as before.

10/31/95 PLAQUE PURIFICATION

virus from 10/17/95 that did not work  
I diluted the virus from  $10^{-1}$  to  $10^{-3}$   
and used the dilutions  $10^{-9}$  +  $10^{-13}$  in  
order to get better plaques.

01C Homolog pA2 HAFB'044  
" " pA2 HAFB'044

Senaplexin homolog pA2 HMSB22  
" " pA2 HMSB22

A#35B to

82

10395 Injections Spinner flasks in  $\alpha$ -401 WOPAS

12 spinners HAABM60 9-10

eystation

250 ml of virus/spinner

10395 Harvested the supernatant from roller bottles (Stc 2) from 10-31-95

Max got ~ 12 l supernatant  
and Nam split 2 roller bottles 1 to 4  
to keep as back up in mem 1 + ST-PBS

J No 6

FBS

10/6/95

## Amplification of CHO cells + MEJ HULLSON

from 10/26/95

## Procedure

Look how the cells are growing in the different mTX concentrations and if possible make a pool of cells growing good in the 2 highest concentrations (30 and 90 mM)

Remove the supernatant  
wash the monolayer with PBS (1 ml)  
Remove the PBS and add 250  $\mu$ l of trypsin and incubate at 37°C for 5'  
Add 250  $\mu$ l of media and resuspend the cells

Prepare the media with the new concentrations of mTX for amplification

Media from 500 mM Stock take 9 ml and add it to 91 ml of MEM + 5% dFBS to have 90 mM and 20 ml of the stock and add it to 30 ml of MEM + 5% dFBS to have 200 mM mTX

For each clone I have now 3 wells

- MEM + 5% dFBS for Van Boven analysis
- 90 mM > amplification
- 200 mM

## Clones in pCHO-1 vector

- ① 10 mM PK 30 and 90 cells died
- ② pool of 30 and 90 mM mTX
- ③ " of 30 and 90 mM

(4) + used the cells growing in 30mm  
90mm <sup>two</sup> cells bleed

(5) pool of 10 and 30mm

(6) pool of 30 and 90mm

(7) pool of 30 and 90mm

do. Agents  
8 and 10 +  
discarded

(9) only 30mm + used

clones in pM346 vector

(a) pool of 30 and 90mm

(5) only 30mm used

(6) only 90mm used

dis. clones  
e and g +  
discarded

(7) pool of 10 and 30mm

(1) pool of 10 and 30mm

(2) pool of 10 and 30mm

do. I prepared 96 well for Dan Bednarek  
in MEM + 5% defat by each clone  
that I split today for assay

No. 10

10/7/95 Gharvested spinner flasks injected on  
10.3.95

12 spinners of Cytotrim -> 24 hr 44 hrs  
HAR Bred 9.10

10.1.95 Transfection in Sf9 cells

HCARA 53 X (extracellular matrix / EGF domain)

Plasmid concentration 1.5 ug/ul

procedure like page 1

10.8.95 Injections Sf9 cells with plaque prepared  
virus from 10.3.95

OIE homolog PA2 HARA084

OIE " PA2gp HARA044

emaphous homolog PA2 HMBE22

" " PA2gp HMBE22

H735870 unknown

3 plaques of each but the plaques  
were too small

10/10/95



## 131095 Infection Spinners flasks

8 spinners in total of cytotax HARB60.9-10  
harvested on 11.13.95

2 spinners for testing new media 1S BAC  
from Mike S. (w/o FBS)

1S2 Regeneration protein HC 0517  
OD6F 4+P522

2 spinners of A2 reg and OD6F in 0.401  
w/o FBS to compare how good is the new media  
1S BAC (see the 5th next page)

131095 Also I gave today to Jan Bednarek  
the 96 well plate and supernatant  
from clones of HIVE031 in CHO cells  
for testing antiviral activity. On the 11.16.95  
were prepared 11.6.95

131395 Harvested 1S9 cells infected with plaque  
purified virus from 13.8.95

01F Homolog PA2	10 H	homolog homolog	10 H
HARB044	10 H	HARB044 PA2	10 H
	5 H		5 H

01F homolog PA250	10 H	homolog homolog	10 H
HARB044	10 H	HARB044 PA250	10 H
	5 H		5 H

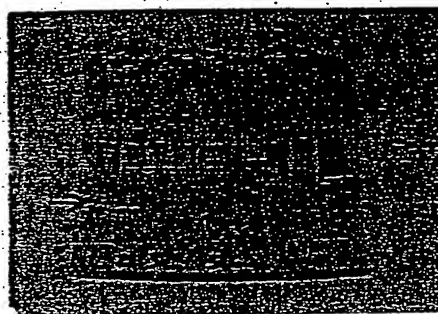
H135572 5.5.10  
unknown 11.11.11

11B95 Formatted transcription from 11B95

11C4355X (extracellular material ECF domain)  
blue array: + but not so strong

11B95

Injection: 11B95



1.2 injection OK. Reaction  
10/11/79

3. CDE (17-18) no core  
see the band below 754

4. CDE (15 BAC) no core  
not see the band below 754

5. A2 Regeneration reaction  
(17-18) no core at the  
band

6. A2 Regeneration reaction  
(15 BAC) no core at the  
band

Conclusion: the 15 BAC nuclei seems to be OK but  
as we can see CDE was not observed so we better try  
to adapt the cells in spinous before injection to make  
our final conclusion!

J. N. L.

# 11/5/95 Amplification of CHO cells TIVF & HUV291 from 10 G. 95

## Clones in pCHO.1 vector

#	2-	90nm	200nm	Comments
1	OK	Dead	Dead	split 2 cells in 30nm & 100nm
2	OK	very clones	Dead	split 30nm & 100nm again in 90nm
3	OK	very good	good	pool of 90nm & 100nm in 200nm
4	OK	very clones	Dead	split 90nm in 90nm
5	OK	very clones	Dead	split 90nm in 90nm
6	OK	very good	very good	pool of 90nm & 100nm in 100nm
7	OK	very clones	Dead	split 90nm in 90nm
9	OK	very clones	Dead	split 90nm in 90nm

## Clones in pV 346 vector

#	2-	90nm	200nm	Comments
1	OK	Good	very clones	pool of 90nm & 100nm in 100nm
2	OK	very clones	" "	pool of 90nm & 100nm in 100nm
3	OK	Good	very clones	" "
4	OK	clones looking	very clones	" "
5	OK	very clones	Dead	pool of 90nm & 100nm in 100nm
6	OK	Good	very clones	pool of 90nm & 100nm in 100nm

the medium was prepared like page 83  
and the procedure for the cells also  
ok. According to Dr. B. B. and the clones 2, 5, 7 and  
9, e showed some antiviral activity

## 11/13/95 PLACQUE PURIFICATION

HICABAS 8X (extracellular protein / E6P  
domain)

from 11/13/95

11.6.93 Injections Spinnerous florets for A-401 w/DPG  
 14 spinners of Eptatin H.A.R.B.M. 9-10

11.30.93 Harvested spinners injected into  
 Supernatant to Yulmoy

11.21.93 Amplification of CHO cells using medium  
 from 10.15.93

		Clones in pCHO vector	
		#	Concentration
only 0.1M		3	100mM
		3	200mM
		6	100mM
		6	200mM
not 2M		1	30mM
		2	90mM
		4	90mM
		5	90mM
		9	90mM
		9	90mM

Clones in pCHO vector

## p1346 vector

u+y		Comments
#	Concentration	
a	100 mM 100 mM	very good for confluent → pass 100,000 and seed in flask
b	100 mM 100 mM	few clones → change media to 100 mM
d	100 mM 100 mM	excellent → pass 100,000 & flask
e	100 mM 100 mM	few clones fighting → change media to 100 mM
f	100 mM 100 mM	" → change media to 100 mM
j	100 mM 100 mM	few clones → change media to 100 mM

## Media preparation:

From 500 mM Stock to prepare:

100 mM	5 ml of the stock	into 20 ml of MEM	-
200 mM	10 ml	"	15 ml "
300 mM	15 ml	"	10 ml "
50 mM	0.2 ml	into	1.8 ml "
50 mM	0.6 ml	"	1.4 ml "

~~100 mM~~

11/2/95 Infections Spinners flasks in ex-401 w/11/95

8 spinners HMSAE22

no  
flask

2 " 6P-F spondin HESA 920

2 " 12-F spondin HESA 920

amount of virus 180 ul / spinner  
due to the holidays we used less than 180

ok

11/2/95 Infections S9 cells with plaque  
purified virus from 11.15.95

HCA BA 58x (extracellular material  
E6F domain)

3 plaques

11/2/95 Harvested S9 cells injected above  
bleb assay

HCA BA 58x ① +++

" ② ++

" ③ +

11/11/95 Harvested spinner flasks injected on 11.22.95

8 spinners HMSAE22 - 2 spx to see

2 " 6P-F spondin } HESA 920

2 " 12-F spondin } HESA 920

sup and cells  
1. Purification

VIX95 Implication of Ctn cells + MF 2 HU-2091  
from 11-21-95

### Planes in p-cho- vector

#	mtx concentration	comments
3	200 mM	Very good and confluent
3	300 mM	split in 300, 400 mM mix + flask
6	200 mM	good, not confluent cells
6	300 mM	splitting a little bit, split to 300, 400
1	2- #	OK but I won't use it anymore
1	50 mM	many clones, split to 50 mM + flask
2	2- #	OK but I won't use it anymore
2	50 mM	cells look OK; confluent split to 50 mM to + flask
9	100 mM	good clones, make a pool
9	100 mM	split to 100, 150 mM in + flask
5	100 mM	very good clones, make a pool
5	100 mM	pool and split to 100, 150 mM
9	100 mM	overconfluent, split to 100 and 150 mM + flask
9	100 mM	not confluent, split to 100 and 150 mM + flask

### Media preparation from 500 mM stock

50 mM	2.5 ml	MEM 1-
100 mM	10 ml	22.5 ml
150 mM	15 ml	40 ml
200 mM	20 ml	35 ml
300 mM	30 ml	30 ml
400 mM	40 ml	20 ml
500 mM	50 ml	10 ml

## Clones in pN346 vector

	f	MTX concentration	Comment
	a	100 nM	good split to biggs
	a	200 nM	very good split, 200, 300 nM
	d	100 nM	confluent but the cells have
	d	200 nM	different shape. Pool and split in large
OK	b	100	no clones, make a pool
	b	100	and split in 100 boxes (+100)
one	e	100	good clones, few cells
splitter	e	100	like b (100, 200)
one	f	100	few good clones, pool
	f	100	and split in 100 boxes - 100
	g	100	good clones, the same
	g	100	like b (100, 200)

## Injection of eggs for virus stock

HMQ BE22 Oryz. Siniperla hemolys from 11.3.95  
 obs: This clone is not full length

b2: HAP044 PA2 - Oryz. Siniperla  
 PA2p was not expressed (5'3' labeling)

HMQ BE22 A2 was expressed but not selected  
 and HMQ BE22 A2p was selected (5'3' labeling)

H135510 plasmids 4, 5, 6. we found no  
 expression 11/28/95



11/30/95 Injections spinner flasks (ex. 401 w/o FBS)

12 spinner A2H46F HHPH35

250 ul of virus / spinner

12/1/95 transfections in L9 cells

PA2 H5A135 (X-ESR) <sup>DMEM</sup> 0.5ug / ul + mini-pap. 100

PA2 H55EL88 (thymus specific <sup>antibody</sup>) 1.0ug / ul

procedure see page 1

12/4/95 Ab arrested L9 injected on 11/28/95 for virus stock

HME BE22(1) PA2GP hemaphysal homolog  
blue array positive

12/4/95 Firing of TNF clones (HUV091) in C10 cells from 11/28/95

<sup>MEM +</sup>  
Firing media: 5% DMSO, 10% FBS

clones to: 3 300 mM MTX → cells looked very good  
3 400 mM MTX → P C10-1 vector

6 300 mM MTX → 100% confluent cells looked  
6 400 mM MTX → P C10-1 vector

d 150 mM 8st confluent, cells looked ok  
PN 346 vector

a 200 mM  
a 300 mM } cells looked good  
PN 346 vector

2 prepared 3 vials with 1 ml of each  
clone and the cells are instant up to  
the concentration of Mx indicated.

12595 Harvested spinner flasks injected on 11.30.95

12 spinners A<sub>2</sub> GNEF HXPS 35  
superimposed to Scott

12595 Split TNE clones (HUV-091) into cells  
from 11.28.95 in MEM + for freezing  
next week

pcho-1

#	Mx	growing concentration
1	50 mM	→ many nice clones
2	50	→ many single cells (??)
4	100	→ many clones fighting
4	150	→ " " " "
5	100	→ few good clones
7	100	→ nice cells 50% confluent
7	150	→ cells growing good
9	100	→ 95% confluent - good cells
9	150	→ 50% " "

## pN346 vector

growing mix concentrations	
2	100 mM very good cells 85% confluent
2	200 mM only good: clones 60%
1	100 mM 90% confluent, x16 cells
1	100 mM many single cells (?)
1	200 mM 100% confluent, different shape
5	100 mM excellent 95% confluent
5	200 mM x16 clones 65% confluent

12695 Translated transcription in H9 cells from 12195

HB3EL88 thymus specific unknown  
new assay was positive

12695 PLASMID PURIFICATION

HB3EL88 thymus specific unknown  
procedure as page 1

12195 Myoblasts spinous plasmids in ex-401 w/o PBS

4 spinous A23187 36A-1 HCEJ 36A

4 " G.P.F. spinous HESAS20

4 " G.P. 1612 L16473 HCEJ31

12/1/95 Harvested transfection in SF cells from 12/1/95

ptr. blue array was weak

HSAAD35 (X-CSFR)

12/4/95 Freezing of +NF clones (H12E091) in CHO cells from 12/5/95

cls: all clones frozen today were good and confluent and I made 3 vials of each

freezing media: 10% FBS, 5% DMSO in MEM 2+

pCMV-1 vector:

1 amplified up to 50 mM 4+  
 9 100 mM  
 9 150 mM  
 7 100 mM

pN346 vector:

1 100 mM  
 5 100 mM  
 5 200 mM  
 1 200 mM  
 2 100 mM

12/11/95 Harvested spinous planks infection 12/7/95

4 spinous A2 VNR 36 A-1 HCEDD36 A-1 sup to Stephen

4 " GP-F spinous HESA 320 sup to Pedro

4 " GP tGF2 Like 3-1 HTEC931 " to David

98

12/2/93 Freezing of TAP clones (conversion) in CHO cells  
from 12.5.93

do all clones (this set) freeze today in general  
looked good but some were less confluent  
than others that's why I prepared 3 or 2 vials  
each.

pN246 vector

2 amplified up to 200 mM Mtx 3 vials

1 100 mM 2 vials

pCHO-1 vector

4 100 mM 3 vials

4 150 mM 3 vials

2 50 mM 3 vials

5 100 mM 2 vials

9 150 mM 3 vials

12/4/93 Infection L9 cells with plaque picked  
viruses from 12.6.93

HB9A C88 Thymus specific gene  
3 plaques

12/4/93 Infection L9 cells with Virus Stock from 11.29.93

HC A B A 58 (3) extracellular protein  
EGF domain

## 12/14/95 PLAQUE PURIFICATION

from 12.7.95

H5AUA35 (X-CSFR)

procedure: Dika page 1

see 12/13/95

12/14/95 Infectious Spinning flasks in E3000 plates

HTECD31 T6E2-like gp 6 spinners

HCABASB(3) extracellular protein E6F domain  
2 spinners

gp HM 6 B423

4 spinners

250 ul of viral spinner

harvested by Nam on 12.18.95

12/19/95

Harvested (by Nam) 5x9 cells infected on 12/14/95  
with plaque purified virus

HB 9-288: Thyms specific gene (2)

(3)

12/19/95

Harvested virus stock infected on 12/14/95

who Nam prepared the stock

HCABASB(3) extracellular protein E6F domain

SUPERVISOR: J. G. =

DATE: 12/19/95

12/19/95

PLAQUE PURIFICATION

Procedure by Nam and

he infected with

H5AUA35 (X-CSFR)

the 5x9 cells with

the plaques!

100

1996

1 1996 Injections Spinner flasks in 1X-400 u0002

2 spinners: HCA852 (kinase protein  
Elaf domain)

2 - 11 TEF 2 active domain (HTEC031)

5 - 11 HNR (HHP5H35)

3 1996 Flaming of CHO clones of TIF (H00091)  
in pCHO-1 vectorclone numbers concentration of MTX already  
resistant:

date:

4	100 mM	12.12.95
4	150 mM	12.12.95
2	50 mM	12.12.95
5	100 mM	12.12.95

1	50 mM	12.8.95
9	100 mM	12.8.95
9	150 mM	12.8.95
3	100 mM	12.8.95
3	300 mM	12.4.95
3	400 mM	12.4.95
6	30 mM	12.4.95
6	400 mM	12.4.95

MT cells were needed in MEM<sup>+</sup> +

5% FBS

12296 Thawing new cordhps D944

2)

Concentration / vial:  $1 \times 10^6$  cells/ml

12.20.95 - 4

frozen by Genti

thr-cells were needed in MEM + 3% FBS

12396 Injected 49 cells for virus stock

HB9EL83 (2) Thymus specific - PA2

50:50 of virus / 1000 flask

12396 Harvested spinnera flasks injected on  
1.12.96

2 spinnera HCASB53-D Stephen

2 " HGF active domain - David

5 " HGF - D Scott

12396 Transfections in 49 cells

HTD9K64 (OAP AC) PA2 0.39  $\mu$ g/ $\mu$ l (Ping Fong/P. Dill)

HE16170 (ESBF II) PA2 0.6  $\mu$ g/ $\mu$ l (Guo-Liang Yu/Jian Ni)

HECB502 (Cytochrome II) PA2 1  $\mu$ g/ $\mu$ l (Guo-Liang Yu/Jian Ni)

procedure like page 1



1.24.96 Amplification of TAP (HUV051) in CHO cells  
thawed on 1.22.96

clone #	amplified up to	split to
9	100 mM	200 mM MTY
9	150	300
7	150	300 mM
1	50	100 mM
4	100	200 mM
4	150	300 mM

Media: from 500 mM MTF stock

	100 mM	200 mM	300 mM	dilutions:
	2 ml of the stock into 8 ml of d-	3 ml of d-	20 ml of d-	10 ml - 0.1 ml MTF 1 ml - 0.9 ml d-
	20 ml	11	30 ml	= 500 mM
	30 ml	11	20 ml	

In general all cells looked good and had 70 to 95% confluency.

the other clones 2, 3 and 6 probably will be amplified tomorrow 1.25.96

clone #	amplified up to	split to
1.25.96 2	50 mM	100 mM
3	400	500
3	300	400
6	300	400
6	400	500
7	100	200

12696 Injections Spinner flasks in ex-401 W/O FRS

obs. the cells were prepared the day before

3 spinners HB9EL88 Thyroxine specific

2 " HTWAF38 EMAP II P.2

2 " HTPB522 ODGF OAP + 11 HJ.F.B.5

3 " HRDCD54 Myelin oligod.

2 " HSAAU35 CSF-2 B-ke

400 ul of virus/spinner

obs. harvested  
on 13196

12696 Transfections in CHO dhfr-D944

HTPB522 (appc102) ODGF PC-3 vector

DNA ~ 2.5 ug/ul Pingfang/Pat. xion

HWFB068 C/EB1 PC-3 vector

DNA ~ 0.6 ug/ul Haodong Li

procedure see page 72

12696 Harvested 59 cells injected

on 12396 for virus stock

HB9EL88 (2) Thyroxine specific

pH<sub>2</sub>

AS System 1000 #2  
MAGNACENTRO  
5/1/2004

blue array: ++

12996 Selection of Recombinant Clones (CHDh-9949)  
transfected on 1.26.96

H1PBS22 (appC102) pc-1 vector

HWE BD68 (CHB-5) pc-1 vector

procedure and media preparation  
see page 73

12996 Harvested transfections in 96  
from 1.23.96

blue array

H1OSK64 (OAR Δe) PA2 ++

HETG170 (ESBF II) PA2 ++

HFCB502 (Eplatin II) plab6 ++

12996 Amplification of TNF CHO clones (HUV1091)  
from 1.24.96

clone #	amplified up to	split to	clone from
5	200 mM Mtx	300 mM Mtx	(highly active)
9	300	400	
3	100	200	
9	200	300	
9	300	400	
4	200	300	
4	300	400	

clones  
from pg 6

0944/

13096

Amplification of tNF CHO clones (HUNZARI)  
from 1.25.96

Clones	[MTX]	split to
2	100 mM MTX	200 mM MTX
3	500	600
3	400	500
2	200	300
6	400	500
6	500	600

the clones are growing pretty good

2196 PLASMID PURIFICATION (did not work)

H103K64 (DAP Δc) pA2

HET6170 (ESBP II) pA2

HFCBSM (Cytochrome II) pA2 GP

I diluted  
from 10:1 to  
10:10

HOUCK17 Muth-1 A2

HOUCK13 Muth-1 GP } from tim

procedure see page 1

2196 Amplification of tNF CHO clones (HUNZARI)  
from 1.30.96

4677

f 3 (500) split to  
600 mM MTX

f 3 (600) 700 mM MTX

this clone is growing for

SUPERVISOR: J. Glen

DATE: 2/1/96

106

2296 Injections Spinner glasss in ex-401 WK 173

1 spinner HTABX03 (EMAP11)

6 spinners HB9EL88 (Thyroglobulin specific)

5 vi 1.61F

300 ul of virus spinners

2596

Implication of exo clones TAF (Hougan)  
from 1.29 and 1.30.96

Clone f. Mtx resistance split to:

3	700	Kept
3	600	Kept
2	200 good, confluent	300 mMtx
2	300 " 70% "	400
6	600 " 80% "	700
6	500 " 80% "	600
5	300 few clones	300
1	200 good, confluent	300
7	400 " "	500
9	400 " "	500
9	300 ok 80%	400
4	400 ok 70%	500
4	300 good, 80% Conf	400

media from 1000 mMtx stock

300 mM	→ 6 ml	→ 14 ml 2- + di FBS
600	→ 8 ml	→ 12 ml
500	→ 10 ml	→ 10 ml
600	→ 3 ml	→ 2 ml
700	→ 5 ml	→ 1.5 ml

2696 Harvested spinous flasks injected  
on 2.2.96

1 2p HTABK03 (EMBPIT) sup to Gffing  
6 2p HR92R8 sup to Gffing  
5 2p AGIF sup to Padua

2796 PLAQUE PURIFICATION (exhibition from 2.19.96)

HT03464 (OAP) pA2 23p26 DE

HT6170 (ESBETI) pA2

HTCB502 (Lipstick II) A25p

HTCK17 Meth-1 A2 } from film  
HTCK17 Meth-1 gp }

2 made dilutions from  $10^{-1}$  to  $10^{-13}$

Procedure like page 1

2196 Transfection in 45 cells

HTDAU65 +NER (soluble)

pA2 gp Project code H602800

Construct from Jian. H.

gag concentration: 0.4 ug/ml

29.96 Injections Spinner flasks in EX-401 w/10 FPS

5 spinners HRC954

2 spinners H+ABK03

4 spinners HBJEC88

1 spinner HBJCLBA + 14 HJ.FB5

amount of virus / spinner: 400 ul

29.96 Amplification of true clones in CHO cells from 25.96

clone +

1 (300)	very good	split to 400 mm	M+X
5 (400)	not good	few cells growing	- keep
9 (300)	good	split to 600 mm	M+X
9 (500)	good	" to 600 mm	
9 (400)	very good	" to 500 mm	
9 (500)	very good	" to 600 mm	
4 (400)	very good	" to 500 mm	
3 (600)	good	" to 700 mm	made a pool
3 (300)	"	" to 700 mm	grown 1 pool
2 (300)	very good	" to 400 mm	less cells
6 (300)	"	" to 800 mm	
6 (600)	"	" to 700 mm	
7 (400)	few cells growing	- keep	

media from 1000 mm stock

600 mm	→ 9 ml	+ 6 ml media + 51 drops
500 mm	→ 5 ml	+ 5 ml
400 mm	→ 4 ml	+ 6 ml
300 mm	→ 3 ml	+ 3 ml
200 mm	→ 4 ml	+ 1 ml

2 B 96 Harvested spinners plates infected on  
2956

5 sp. H2DCD54 sup to Arvind

2 sp. H2ABK03 sup and all to Jeff

4 sp. H2G288  $\rightarrow$  sup to Pauling

1 sp. H2G288 + PB5

2:1496 Harvested transfection in 549 cells  
from 27.96

H2OAU65 + H2R (soluble)

pA2 GP Project code: H2OAU65

2:1496 Picking clones from C129 cells dhp-  
for selective media from 1.29.96

H2PS22 (20p C102) PC-1 vector

H2EBD68 (C101) PC-1 vector

We have many clones of each construct this time

procedure was a little bit changed this time

take the hybridoma plate, discard the media  
and wash twice with PBS

Remove the PBS and add 5ml of trypan  
incubate at 37°C for 5 minutes

With your scope inside the hood examine your  
ent plates and with a bit of practice pick out  
by eye and seed in MEM + 5% FBS (diphenyl)  
want to test for antibody activity for 1 or 2 in  
select media + MEM (20-25) + 5%

MEM + 5% dipBs



In both cases we needed this time in mind: (24 well dish) 1 ml of media/well

- Incubate the cells at 37°C and look in 3 or 4 days how the clones are growing.

I pick this time 48 clones of OAP

48 clones of CKB-1

and as a back up, I changed the media of 1 hybridoma plate of each gene and incubated 37°C for a week or so. I used 20 mM MTX instead of 10 mM.

2.15.96 Amplification of NF clones in CHO cells  
from 2.9.96

Clone 1

3 (100) very confluent, fighting a bit, split to 800 and 400

2 (400) confluent, very good, split to 800 and 400

6 (400) > not confluent but fighting for this resistance, split to the same concentration of MTX

6 (800) >

Media: 5 (400) cells died

500: 6 ml & 4 ml

100: 14 ml & 6 ml

100: 14 ml & 6 ml

100: 14 ml & 6 ml

100: 14 ml & 6 ml

100: 14 ml & 6 ml

100: 14 ml & 6 ml

100: 14 ml & 6 ml

100: 14 ml & 6 ml

100: 14 ml & 6 ml

100: 14 ml & 6 ml

100: 14 ml & 6 ml

100: 14 ml & 6 ml

100: 14 ml & 6 ml

100: 14 ml & 6 ml

100: 14 ml & 6 ml

100: 14 ml & 6 ml

100: 14 ml & 6 ml

100: 14 ml & 6 ml

100: 14 ml & 6 ml

100: 14 ml & 6 ml

100: 14 ml & 6 ml

100: 14 ml & 6 ml

100: 14 ml & 6 ml

100: 14 ml & 6 ml

100: 14 ml & 6 ml

100: 14 ml & 6 ml

100: 14 ml & 6 ml

100: 14 ml & 6 ml

100: 14 ml & 6 ml

100: 14 ml & 6 ml

7 (400) not confluent, cells dark or split to 800 and 400

1 (400) v. good, split to 800 and 400

9 (600) OK split to 800 and 400

9 (500) > very good split to 600 and 400

9 (600) >

4 (500) v. good -> split to 600 and 400

4 (100) v. good -> split to 600 and 400

2/16/96 Injections Spinner flasks in DC-400 cells

2 spinners + human sample HBSL88  
 5 " A2 + GFL full length HFC031 (25)  
 5 " HRC054

2/16/96 Injections Sp9 cells with plaque pumped  
 viruses from 2/3/96

HRC054 (OAP) pA2

HET617D (ESBFI) pA2

HFCB502 (Epitaxin II) A2 sp } from  
 time

HOUCK17 Meth-1 A2

HOUCK17 Meth-1 A2 sp

2/16/96 Infection Sp9 cells for virus stock

HSAAD35 (X-CSEB) +3

50 ul of virus / flask

2/20/96

Harvested Spinner flasks infected on  
 2/16/96

2 sp HBSL88 -> to Yubing

5 sp A2 + GFL -> to Yubing

5 sp HRC054 -> to Yubing

Obs: This was the day of our moving to 9440

112

2/21/96 Harvested S9 cells injected on 2/16/96  
for virus stock

MSAAU35 (CSF-1) 13

AL-00-007 Rec 13  
REMARKS: 000000  
01 07/27/96

blue assay was good

2/21/96 Harvested S9 cells injected on 2/16/96  
with plaque purified viruses

HFC 9K64 OAP pA2

#E+617D ESBP1 pA2

HFC B502 Ciptatin II A9P

HOICK17 Muth-1 A2

HOICK17 Muth-1 A96P

> for time

blue assay was good for all

2/22/96 Changed the media of CKB-1 clones #HFC506P  
and HFC B502 (23p102) OAP in CHO cells  
from 2/14/96 and TNF clones from 2/13/96

obs: I used media<sup>1st FBS</sup> in order to give samples  
for assays.

HFC B502 - OAP - I gave to Don Bednarek  
clones # 1 to 48

+ 49 CHO dh-7944 supernatant  
+ 50 MEM 1 + 51 dFBS

#WFB5068 CKB-1 I gave to Suk for the Biacore  
clones # 1 to 48

+ 49 CHO 7944 supernatant

Results: for the antiviral assay Dan did  
not detect antiviral activity

for the Biacore assays see the results on 2:27:30

2:23:36 Amplification of CHO clones: OAP, CRB-1, TNF

1) OAP #18522 - split all 48 clones  
in 20 mM M+X

2) CRB-1 HWEF068 - split all 48 clones  
in 20 mM M+X

3) TNF clones HWEF091

968

clone #

9(600) split to 700 mM M+X  
4(700) " 800

9(700) " 800 all clones looked  
9(600) " 700 in general good!

7(500) " 600 media none  
4(700) " 800 1000 mM M+X

600 mM: 9 ml + 6 ml M+X

700 mM: 7 ml + 3 ml

800 mM: 6 ml + 4 ml

900 mM: 9 ml + 1 ml

2(500) " 600

3(900) " 900

6(700) " 800

6(800) " 900

114

2/2/96

Amplification of CHO clones: OAP, CRB1  
from 2/23/96

CRB1 Results from the Bioreactor

CRB1 - CHO clones HWPB068

Clone #	Column 1	Column 2	Column 3	Column 4	Column 5
1	21	61.71		3	207.0
2	31	207.0		40	126.0
3	41	110.1		40	126.0
4	51	32.21		4	110.1
5	61	60.51		27	112.7
6	71	64.71		24	67.2
7	81	83.71		7	94.7
8	91	74.61		10	63.0
9	101	70.41		6	63.1
10	111	77.51		2	61.7
11	121	42.71		1	60.5
12	131	21.21		1	74.6
13	141	34.01		1	74.6
14	151	61.71		30	63.0
15	161	42.31		15	61.7
16	171	37.01		20	62.1
17	181	16.71		31	60.4
18	191	62.51		12	67.7
19	201	11.51		10	62.0
20	211	2.51		25	60.3
21	221	7.71		17	37.0
22	231	29.61		30	37.0
23	241	97.21		1	37.0
24	251	22.11		8	32.2
25	261	10.01		23	29.6
26	271	3.71		30	23.1
27	281	37.41		44	22.9
28	291	52.11		23	22.1
29	301	63.41		13	21.2
30	311	60.41		4	17.5
31	321	7.01		10	16.7
32	331	3.11		27	16.4
33	341	2.01		30	11.5
34	351	60.31		17	10.0
35	361	1.31		10	10.0
36	371	10.01		20	6.1
37	381	22.41		41	7.0
38	391	9.11		22	7.7
39	401	2.11		22	7.4
40	412	7.01		40	6.0
41	421	17.21		23	3.1
42	431	0.01		24	2.9
43	441	22.01		21	2.5
44	451	0.11		40	2.1
45	461	120.21		27	1.0
46	471	1.01		20	1.0
47	481	124.61		43	0.4
48	491	6.01		45	0.1

clones that we  
pick to amplify:is 3, 9, 8, 46  
seeded in 20, 30 and  
50 ml MIXclones that we  
pick to freeze as  
back up:is 4, 27, 24  
seeded in 20 and  
40 ml MIX

OAP: HWPB522

split all clones in 40 ml MIX for amplification  
and 20 ml MIX for 535 labelling on 3.1.96

22496 thawed new S49 cells

1 vial P-31-32 seeded in space 101-41P35  
1 vial P-31-32 " in ex-401 21-P35

22896 transfections in S49 cells

HHPEW62 from Y. Li pA2 DNA ~ [0.5 µg/ml]

HSVA 586.506 from John Greene 16F-1 mouse papilloma  
fused to gp signal (aphid) - DNA ~ [1 µg/ml]

procedure like page 2

22896 Amplification of tunc - human CHO clones  
from 223.96

clone to

4 (700)	spld to	800 mM M+K	
4 (800)		900	
9 (700)		800	
9 (800)		900	
2 (600)		700	all clones looked
1 (600)		700	OK
7 (600)		700	more than 80% confluent
7 (800)		900	
3 (900)		1000	
6 (800)		900	these clones the cells
6 (900)		1000	looked a bit bit fighting

from 1000 mM M+K stock

media			
800 mM	→ 8 ml	→ 2 ml	SUPERVISOR <u>50/60</u> DATE <u>2/29/92</u>
900 mM	→ 18 ml	→ 2 ml	
700 mM	→ 10.5 ml	→ 4.5 ml	

116

3.1.96 Infection Laminas flasks in EX401 WIC FBS

4	spinners	VEGF-2	HOSBD17	0400
4	"	VEGF-3	HmWCF6	04600
2	"	A35		

1	41	HOSK17	Muln-1	(3)	A2
2	"	HOSK17	Muln-1	(3)	GP

400  $\mu$ l of virus/spinner

3.1.96 S35 Labelling of PAP. CHO clones from 2.23.96

Obs: Reimer labelled the cells for me

The cells were kept in the same media 20mM MTr, 5% dFBS in MEM  $\alpha$  and the radioactive lys. (2  $\mu$ l/well) was added.The lys was diluted in 900  $\mu$ l of the media and the amount of radioactive material/well was  $\approx$  20 Mci.

3.4.96 Kathy prepared the gels and loaded the samples for electrophoresis.

No 10

3.4% Amplification of CK $\beta$  clones  
from 2.2% and CAP clones.

CK $\beta$ 1  
clone 1 (for amplification)

3

96

48

I discarded the 20mm  
and seeded the cells growing  
in 30mm in 40mm and  
the cells growing in 50mm in 60mm

clone 1s (for freezing)

4

24

24

I discarded the cells growing  
in 30mm of 74 and 120  
and seeded the cells growing  
in 40mm in 50mm

74 I made a probl. of 20 on 40mm and  
split in 50mm because I had less cells

All clones looked in general good

CAP: H+PR522 (48 clones)

well

The cells of clone 1.20 died and was discarded

All the rest I split in 60mm Mtx and  
in general all clones looked good

g. 16. 10



3596 Harvested samples injected on 31.96

the sup of VEGF-2, VEGF-3 and A35  
I gave to Scott

the sup of Meth-1 (3) I gave to Alex

3596 Harvested two transfections from 2.28.96

Obs: H5VA 586 506 gp was contaminated/  
probably is the gp! <sup>from 2.28.96</sup>  
↳ to be redone

HYPEN2 was not contaminated but  
the blue array was a little bit weak but positive!

3696 Amplification of tnf clones from  
2.28.96 <sup>↳ H5VA-091</sup>

clones is

7 (700) discarded

7 (900) split in MEM-<sub>1</sub> 1, 3 and 5  $\mu$ M H<sub>2</sub>O<sub>2</sub>

3 (1000) in " , 2, 4 and 6  $\mu$ M

6 (900) discarded

6 (1000) split in MEM-<sub>1</sub> 2, 4 and 6  $\mu$ M

1 (700) in " , 1000M, 1 and 2  $\mu$ M

2 (700) in " , " , 1 and 2  $\mu$ M

		9 (800) discarded	
		9 (900) split in MEM-2, 1, 3 and 5 $\mu$ m	
		4 (800) discarded	
		4 (900) split in MEM-2, 1, 3 and 5 $\mu$ m	
96			
	3.6.96	PLAQUE PURIFICATION	
6d/96		A3 HHPEN 62 (from 3.5.96)	
		H10AUV 65 gp INF 0 soluble (from 2.14.96)	
itil		A2 IL-10 homol. HMUBM23	
		GP IL-10 II HMUBM23	>> from ham
	3.8.96	injections spinous flasks in excess media	
		2 spinous T6F2 HEC031	
		6 H1 HCE036 TSP-2	
	3.8.96	Transfection in Sf9 cells	
		HSVA 186 506 gp from John Greene	
M		= 16F.1 mature protein fixed to gp signal peptide	
M			
		Return for the second time	
		re 3.5.96	

120

3.8.96 Amplification of CHO D944 clones

CR/31 and OAP from 3.4.96

CR/31 (HWPB D68)

clones #5 (for amplification)

3, 4, 6, 48: growing before in 40 and 60 mm  
all looked good.

1 split of 3 clones in MEM + ST-diFBS, 50 mm,  
100 mm, 200 mm, 500 mm in a 6 well dish  
clones #5 growing before in 50 mm. 1 split in MEM +  
ST-diFBS + 60 mm MEM

OAP (HWPB 523)

clones #5 4 and 6 growing in 60 mm confluent,  
1 split in MEM + ST-diFBS, 50 mm and 100 mm (Rivell)

Obs: Results of the S35 labelling from 3.4.96

clones #5 1, 4, 6, 26 and 44 showed good  
production  
#5 4 and 44 showed even better production  
of OAP in 14 hours of exposure

On 3.8.96 I amplified the clones #5 4 and  
6 in MEM + ST-diFBS, 50 mm and 100 mm (Und)

3.11.96 Amplification of CHO D944 clones from 3.8.96

CR/31 (HWPB D68)

clone #5

48 growing before in 2- 50, 100, 200, 500 mm  
split in 2- 200, 300, 400 (post at 50/100, etc)  
the cells at 500 mm died

$\pm 3$  growing in  $\alpha$ -50, 200, 500 mM  
split in  $\alpha$ -2, 200, 300, 500 mM (pool of 100, 200, 500)

$\pm 46$  growing in  $\alpha$ -50, 100, 200, 500 mM  
split in  $\alpha$ -2, 200, 300, 500 (pool of 100, 200, 500)

$\pm 5$  4, 29, 27 growing in 60 mM MTK & split  
in MEM + ST-FBS in order to  
expand the cells first for freezing as  
a back up.

In general the clones of CRBS looked good!

ODP (HT-PB522) from 3.8.96

clones  $\pm 5$

4 growing in  $\alpha$ -50, 100 mM  
split in  $\alpha$ -1, 100, 200, 300 (pool of 50, 100 mM)

3.9.96 6 growing in  $\alpha$ -50, 100 mM  
split in  $\alpha$ -1, 100, 200, 300 (pool of 50, 100 mM)

1 growing in 60 mM MTK

26 " " "

44 " " "

in 24 well

2 split in  $\alpha$ -100 mM  $\pm 1$

$\alpha$ -100, 200 mM  $\pm 26$  > 6 cells

$\alpha$ -100, 200 mM  $\pm 44$

did not use this  
concentration only 100 mM!

122

31296 96 inverted Spinnus flasks infected on 53.94

2 spinnus +6F2 → supernatant to David

6 " ESP-2 → " to Stephen

31396 Implication of CHO +AE clones HIV-91  
from 36-56Obs: in 3.11.96 I changed the media of  
all clones (Mant +5 + FBS) to recover the  
cells a bit but because it was not so good  
and in 3.13.96 the cells looked good again  
I started to split.

clone #5

2 met the cells growing in 24m in 1, 2, 4, 6, 10m

9 " " " " in 5, 10m in 2, 5, 7, 10, 15m

4 " " " " in 5, 10m in 2, 5, 7, 10, 15m

6 " " " " in 6, 10m in 6, 8, 10, 15m

3 " " " " in 6, 10m in 6, 8, 10, 15m

2 " " " " in 24m in 2, 4, 6, 10m

2 " " " " in 5, 10m in 2, 5, 7, 10, 15m

1.80.10

3.396 Injection S9 cells with plaque purified  
virus from 3.656

#2 HPER62

H10AUG5 gp TNF $\alpha$  soluble

3.496 Harvested transcription in S9 cells from 3.896

HSV 386 S06 gp

16F-1 mature particle prep to gp. spread  
preplate

3.496 Freezing of CHO clones CKB-1  
from 3.496 HWPSD68

The clones are resistant up to 60mM NaX

Freezing media: MEM $\alpha$ , 5% DMSO, 10% FBS

clones frozen: 4, 24, 27

3 vials of each

overnight at  $-70^{\circ}\text{C}$  and after at  $-140^{\circ}\text{C}$

cell density / vial -  $3 \times 10^5$  cells/ml

~~3.496 to~~

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